

Compliance Workshop for



Schools

Presented by:

The County of San Diego
Department of Environmental Health
Hazardous Materials Division
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March 2018

First things first

- Today's training is a quick 3 hours
- Feel free to stand up and stretch
- Restroom locations
- Fire extinguishers, emergency exits, and AED.



Today's Agenda

- CUPA Overview
- Hazardous Materials Requirements
- Hazardous Waste Requirements
- Mercury at Schools

-BREAK-

- Medical Waste Requirements
- Inspection process (What to expect)
- Common Violations
- Return to Compliance (How to)



Why is this so Important?





CUPA OVERVIEW

What and who is CUPA?

Certified Unified Program Agency (CUPA)



County of San Diego



Dept. of Environmental Health



Hazardous Materials Division

Certified Unified Program Agency (CUPA)

- Consolidation of six State-regulated environmental programs
 - Consistency, consolidation, coordination
- Administration
- Permit
- Inspection
- Enforcement

CUPA Programs

- Aboveground Petroleum Storage Act (APSA) Program
- California Accidental Release Prevention Program (CalARP)
- Hazardous Materials Release Response Plans & Inventories (Business Plans)
- Hazardous Waste Generator
- Onsite Hazardous Waste Treatment
- Underground Storage Tank (UST) Program
- Medical Waste Management Act*
(*adopted by County Ordinance)

Administration

- California Health and Safety Code (HSC)
 - Division 20, Chapters 6.5, 6.67, 6.7, & 6.95
 - Division 104, Part 14*
- California Code of Regulations (CCR)
 - Titles 19, 22, & 23
- San Diego County Code (SDCC) of Regulatory Ordinances
 - Title 6, Division 8, Chapters 9, 10, 11, & 12

CUPA Permit

Unified Program Facility Permit (UPFP)

(HSC, Ch. 6.11, Section 25404)

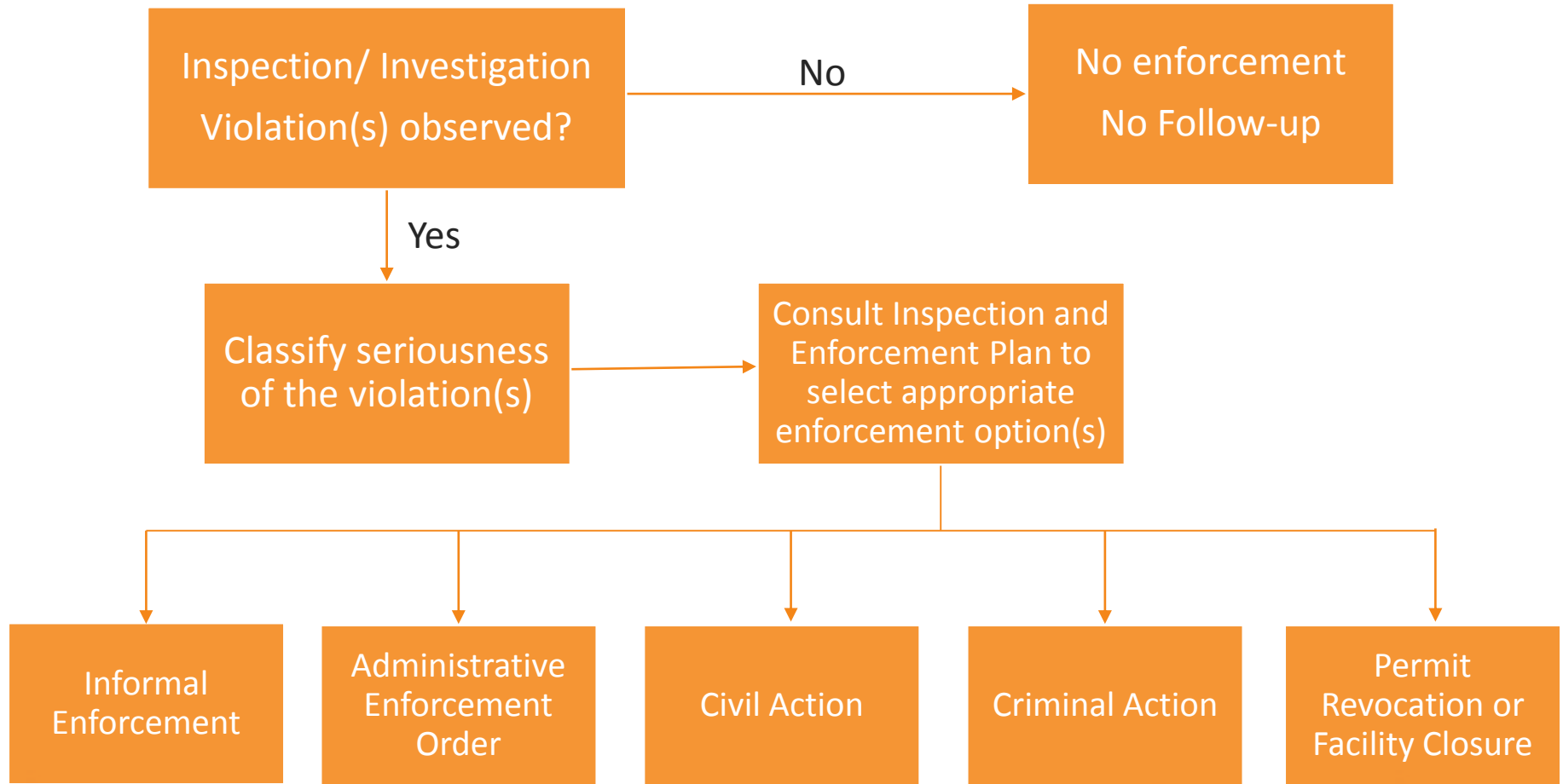
- Permit issued pursuant to HSC, Chapter 6.11
- Permit encompasses requirements of
 - HSC, Section 25284 (USTs), and
 - Local ordinance or regulation regarding generation or handling of hazardous waste or hazardous materials

Authority to Inspect

HSC, Sections 25185, 25195, 25511

- ...any authorized representative of the department ... may, at any reasonable hour of the day, do any of the following:
 - Enter and inspect ...
 - Carry out any sampling activities...
 - Inspect and copy any records...
 - Photograph any... condition constituting a violation of law found during an inspection...
- It is a misdemeanor to willfully prevent, interfere with, or attempt to impede... inspection, records, evidence

Enforcement



Schools that...

- Generate hazardous waste
- Store hazardous materials
- Store a hazardous substance in a UST
- Generate medical waste...

...need a Unified Program Facility Permit

[UST: Underground Storage Tank]

Common places at schools for hazmat and hazwaste

- Grounds & Maintenance
- Shop and science classes
- District or Contractor's Trailers
- Nurse's office
- Cooling/Boiler Room
- Custodial Services
- Drama/Set Design
- Swimming Pool
- Fleet maintenance



HAZARDOUS MATERIALS BUSINESS PLAN REQUIREMENTS

Who is subject to hazmat requirements?

What are the requirements?

Do you need a HMBP? (HSC 25507)

Basic hazmat reportable thresholds

- ✓ 55 gal of liquid
- ✓ 200 ft³ of compressed gases
- ✓ 500 lbs of solids
- ✓ Highly toxic gases with a TLV \leq 10 ppm
- ✓ EHSs in TPQ (per 40 CFR Part 355)

[HMBP: Hazardous Materials Business Plan]


[TLV: Threshold Limit Value]


[EHS: Extremely Hazardous Substance]

[TPQ: Threshold Planning Quantities]

- Facility Information
 - Business Activities
 - Business Owner/Operator Information
- Hazardous Materials Inventory
 - Inventory
 - Site Map
- Plans
 - Emergency Response Plan
 - Employee Training Plan


HMBP, CERS

CERS Regulator  [Submittals](#) [Facilities](#) [Businesses](#) [Regulators](#) [Compliance](#) [Responders](#) [Reports](#)




Facility Submittal : **HIGH SCHOOL** [Print Submittal](#) 

Home » [Submittal Search](#) » Submittal:

Submittal: Jun. 30, 2015 3:50 PM




Facility Information 

Accepted Jul. 15, 2015 [Set Submittal Status](#)

Submitted for CERS ID
Submittal was **Accepted** on 7/15/2015 by [for San Diego County Department of Environmental Health](#)
[Business Activities](#)  
[Business Owner/Operator Identification](#) 



Hazardous Materials Inventory

Accepted Jul. 15, 2015 [Set Submittal Status](#)






Submitted for CERS ID
Submittal was **Accepted** on 7/15/2015 [for San Diego County Department of Environmental Health](#)
[Hazardous Material Inventory](#)  
[Site Map \(Official Use Only\):](#) 

Emergency Response and Training Plans

Accepted Jul. 15, 2015 [Set Submittal Status](#)

Submitted for CERS ID
Submittal was **Accepted** on 7/15/2015 [for San Diego County Department of Environmental Health](#)
[Emergency Response/Contingency Plan:](#) 
[Employee Training Plan:](#) 

[Download EDT Regulator Facility Submittal XML Package](#) [Submittal Search](#)

  CERS Help  Settings  Notifications 

HMBP, Facility

- Business Activities
 - Facility address
 - Reasons for a CUPA permit
- Business Owner/Operator Identification
 - Who owns the facility?
 - Who operates the facility?
 - Who are the emergency contacts?
 - What is the contacts' information?

HMBP, Inventory (HSC 25505 (a)(1))

- Hazardous Materials Inventory
 - Each inventory item subject to HMBP

***NOTE**, even if not subject to HMBP,
the following also have to be reported in the hazmat inventory:*

- **Hazardous waste in any amount**
(27 CCR 15188 (b-c); SDCC 68.904(b))
- **Medical waste in any amount**
(SDCC 68.904(a)(2))

HMBP, Site Map (HSC 25505(a)(2))

- ✓ North orientation
- ✓ Loading areas
- ✓ Internal roads
- ✓ Adjacent streets
- ✓ Storm and sewer drains
- ✓ Access and exit point
- ✓ Emergency shutoffs
- ✓ Evacuation staging areas
- ✓ Hazardous material handling and storage areas
- ✓ Emergency response equipment
- ✓ Any additional requirements per CUPA

HMBP, Standardized Site Map Symbols

SITE MAP SYMBOLS

ENTRANCE/EXIT	FENCE	SAFE REFUGE AREA
EMERGENCY RESPONSE EQUIPMENT	SEWER DRAIN	FIRE HYDRANT
FIRE SPRINKLER CONNECTION	F.D. STANDPIPE OUTLET	STORM DRAIN OR CULVERT
		KNOX BOX
STORAGE TANKS AND CAPACITY		
UNDERGROUND	ABOVE GROUND	PLATING TANKS
	OR	
MAIN UTILITY SHUT OFFS		
ELECTRICAL	GAS	WATER
ANNUNCIATOR PANEL	STAIRWELL (i.e. 1 thru 3)	ELEVATOR Range of Floors

HAZARDOUS MATERIALS STORAGE/USE AREA SYMBOLS

IMMEDIATE (ACUTE) HEALTH HAZARD

An adverse effect resulting from a short-term exposure to a chemical. Includes highly toxic, toxic, irritant, sensitizers, corrosive chemicals. Examples: cyanide, hydrochloric acid, sodium hydroxide, chlorine gas

MATERIAL WASTE



DELAYED (CHRONIC) HEALTH

An adverse health effect resulting from long-term exposure to a substance. The effects could be a skin rash, bronchitis, cancer or any other medical condition. Examples include carcinogens such as benzene, formaldehyde, and methylene chloride.



FIRE HAZARD

Includes flammable liquids and solids, combustible liquids, pyrophorics and oxidizers. Examples include solvents like acetone and alcohol, solvent based paints, gasoline, naphtha solvent, acetylene gas cylinders, propane gas.



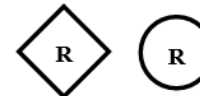
SUDDEN RELEASE OF PRESSURE

This category includes explosives, blasting agents and compressed gases. Examples: nitrogen, oxygen, acetylene, helium, carbon dioxide, etc.



REACTIVE

This category includes unstable air reactive, water reactive or shock materials. Examples: organic peroxides, fine metal dusts like magnesium, aluminum, phosphorous, cyanides, sulfides and picric acid.



MEDICAL (BIOHAZARDOUS) WASTE

Medical or biohazardous wastes generated in medical, dental and lab settings. Typically needles and syringes in sharps containers, infectious materials in biohazard bags, clinical and microbiological lab specimens and some pharmaceutical waste.

Use the appropriate symbol from this column



RADIOACTIVES

Includes mixed waste and radioactive sources used in labs and industrial settings. Examples include: Scintillation materials, nuclear medicine waste and R & D materials and waste.



EXTREMELY HAZARDOUS

Includes materials listed in Appendix A of Part 355 of Subchapter J of Chapter 1 of Title 40 of the Code of Federal Regulations. Examples include: Fluorine gases, Silane, Fumigation gases



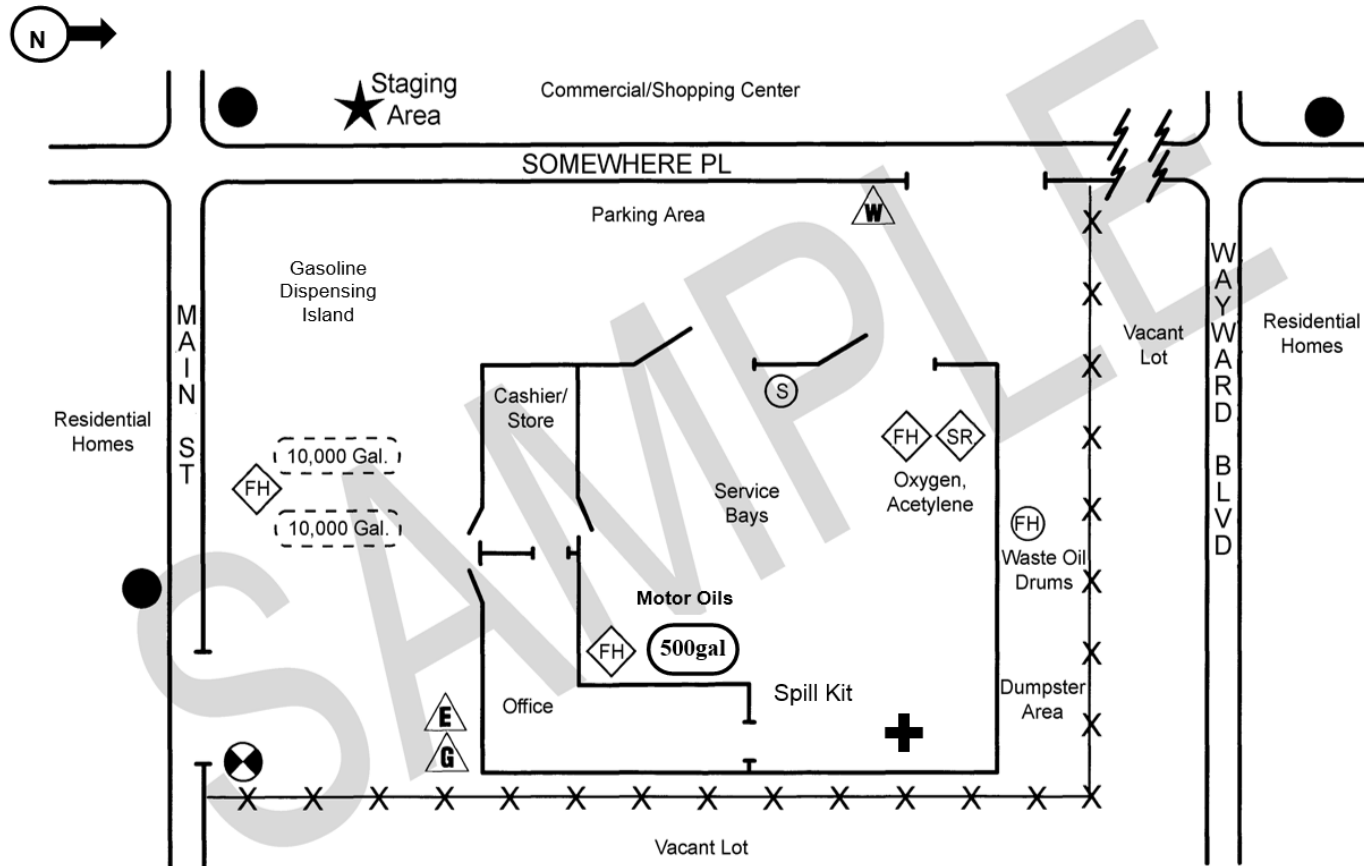
HMBP, Site Map

SAMPLE SITE MAP (Page 1 of 1)

BUSINESS NAME Joe's Automotive Repair

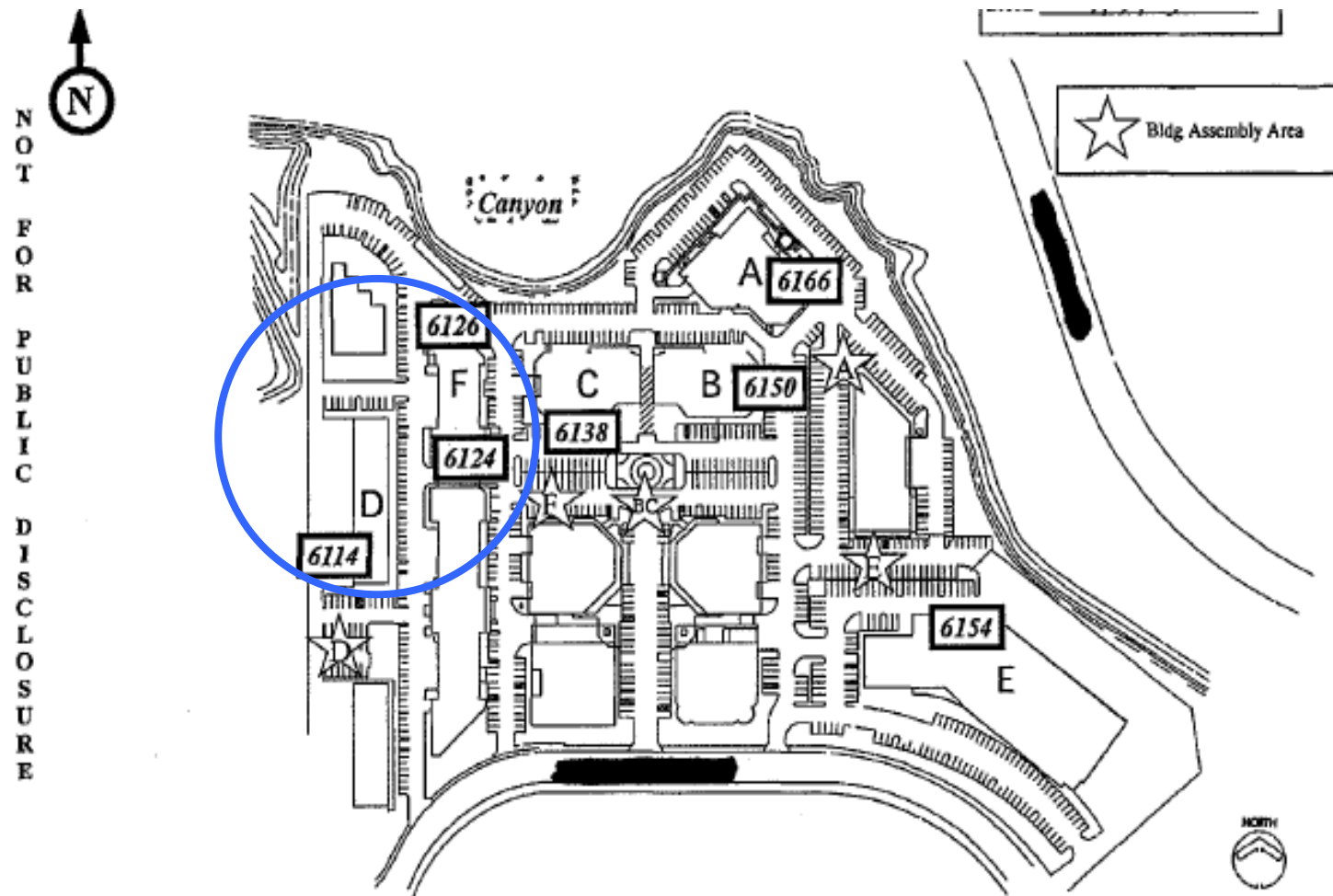
DATE 02/09/2016

BUSINESS ADDRESS 1234 Somewhere Pl., Anywhere, CA 92123

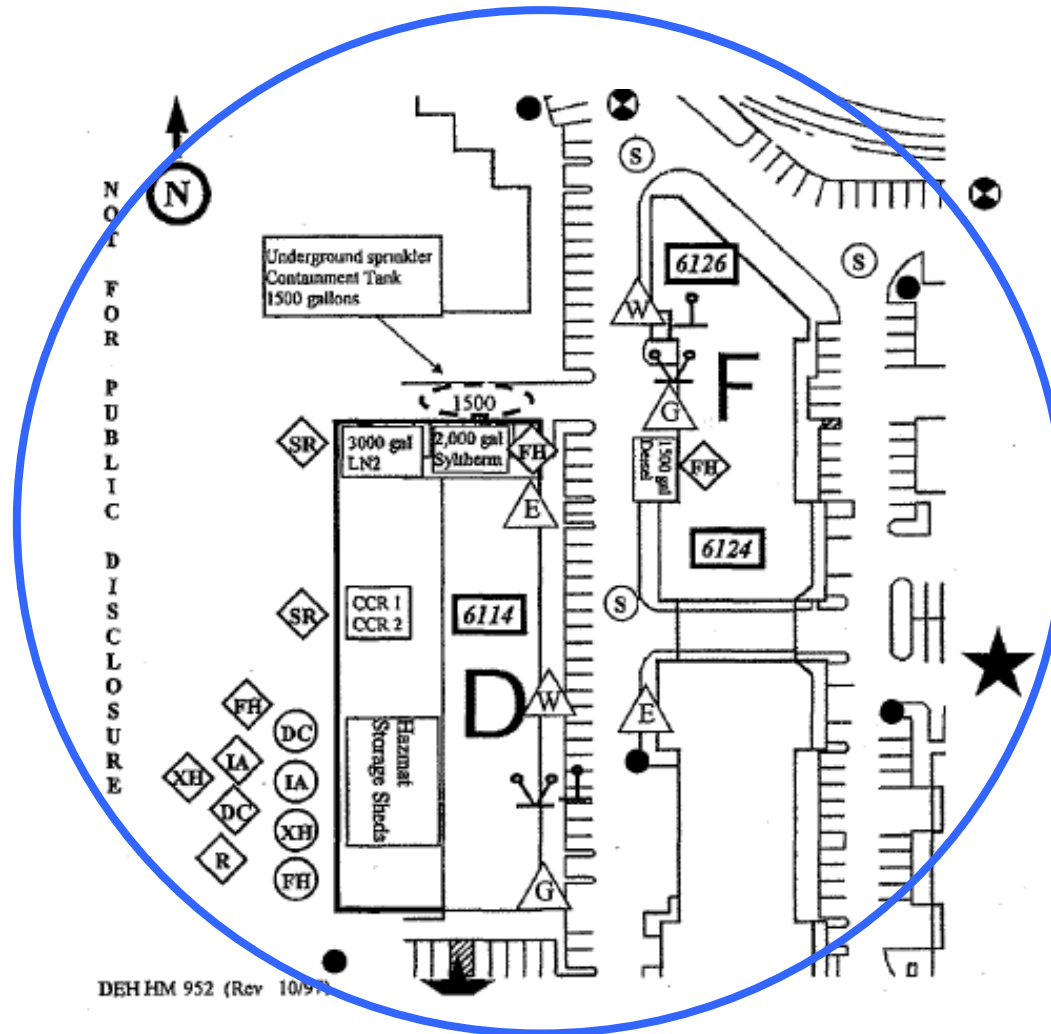


County of San Diego CUPA
Department of Environmental Health-Hazardous Materials Division

HMBP, Site Map



HMBP, Site Map



HMBP, Emergency Response Plan

- Emergency Response Plan (HSC 25505(b)(3))
 - Immediate notification contacts
 - Local emergency personnel
 - CUPA
 - Procedures for the mitigation of a release
 - To minimize any potential harm or harm to persons, property, or the environment
 - Evacuation plans and procedures

HMBP, Employee Training Plan (HSC 25505(b)(4))

- Employees have to be trained on safety procedures in the event of a release
 - Familiarity with the ERP
 - May consider the position of each employee
- All new employees + Annual refresher
- Document training
 - Keep three years worth

HMBP, CERS Consolidated Form

CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS) CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN

Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN

A. FACILITY IDENTIFICATION AND OPERATIONS OVERVIEW

FACILITY ID #														A1.	CERS ID #	A2.	DATE OF PLAN PREPARATION/REVISION (MM/DD/YYYY)	A3.
BUSINESS NAME (Same as Facility Name or DBA - Doing Business As)																		A4.
BUSINESS SITE ADDRESS																		A5.
BUSINESS SITE CITY															A6.	CA	ZIP CODE	A7.
TYPE OF BUSINESS (e.g., Painting Contractor)												A8.	INCIDENTAL OPERATIONS (e.g., Fleet Maintenance)					A9.
THIS PLAN COVERS CHEMICAL SPILLS, FIRES, AND EARTHQUAKES INVOLVING (Check all that apply):																		A10.
<input type="checkbox"/> 1. HAZARDOUS MATERIALS; <input type="checkbox"/> 2. HAZARDOUS WASTES																		

B. INTERNAL RESPONSE

INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR BY (Check all that apply):	B1.
<input type="checkbox"/> 1. CALLING PUBLIC EMERGENCY RESPONDERS (e.g., 9-1-1)	
<input type="checkbox"/> 2. CALLING HAZARDOUS WASTE CONTRACTOR	
<input type="checkbox"/> 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM	

C. EMERGENCY COMMUNICATIONS, PHONE NUMBERS AND NOTIFICATIONS

In the event of an emergency involving hazardous materials and/or hazardous waste, all facilities must IMMEDIATELY:

1. Notify facility personnel and evacuate if necessary in accordance with the Emergency Action Plan (Title 8 California Code of Regulations §3220);
2. Notify local emergency responders by calling 9-1-1;
3. Notify the local Unified Program Agency (UPA) at the phone number below; and
4. Notify the State Warning Center at (800) 852-7550.

HMBP (HSC 25508)

- Initial HMBPs, submitted to CUPAs within 30 days
- HMBPs to be submitted to CUPAs through CERS
- HMBPs have to be **certified annually** through CERS or...
- Within 30 days of changes to the HMBP (HSC 25507.2(d)(2))

[CERS: California Environmental Reporting System]

HMBP, Additional (HSC 25508.1)

- Events that require HMBP updates:
 - A 100 % or more increase in the quantity of a previously disclosed material, including previously undisclosed hazmat
 - Change to emergency contacts
 - Change of business or facility address
 - Change of business ownership
 - Change of business name
 - A substantial change in the handler's operations that requires modification to any portion of the HMBP

Hazmat Spills

All significant spills, releases, or threatened releases of hazmat must be immediately reported

- What is a release?
 - Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, unless permitted or authorized by a regulatory agency. HSC 25501(q)
- What is a threaten release?
 - It is a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment. HSC 25501(u)

Hazmat Spills

At a minimum, the “spiller” should call:

- 911 or the local emergency response agency (Fire Department)
- CUPA at (858) 505-6657
- State Office of Emergency Services (OES) at (800) 852-7550
- Other agencies
 - National Response Center (NRC)
 - Occupational Safety and Health Administration (OSHA)
 - California Highway Patrol (CHP)
 - California Department of Public Health (CDPH)



***Cal* OES**

GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

California Hazardous Materials Spill / Release Notification Guidance

To Report all significant releases or threatened releases of hazardous materials:

First Call:

9-1-1

(or local emergency response agency)

Then Call:

Cal OES State Warning Center

(800) 852 - 7550 or (916) 845 - 8911

February 2014

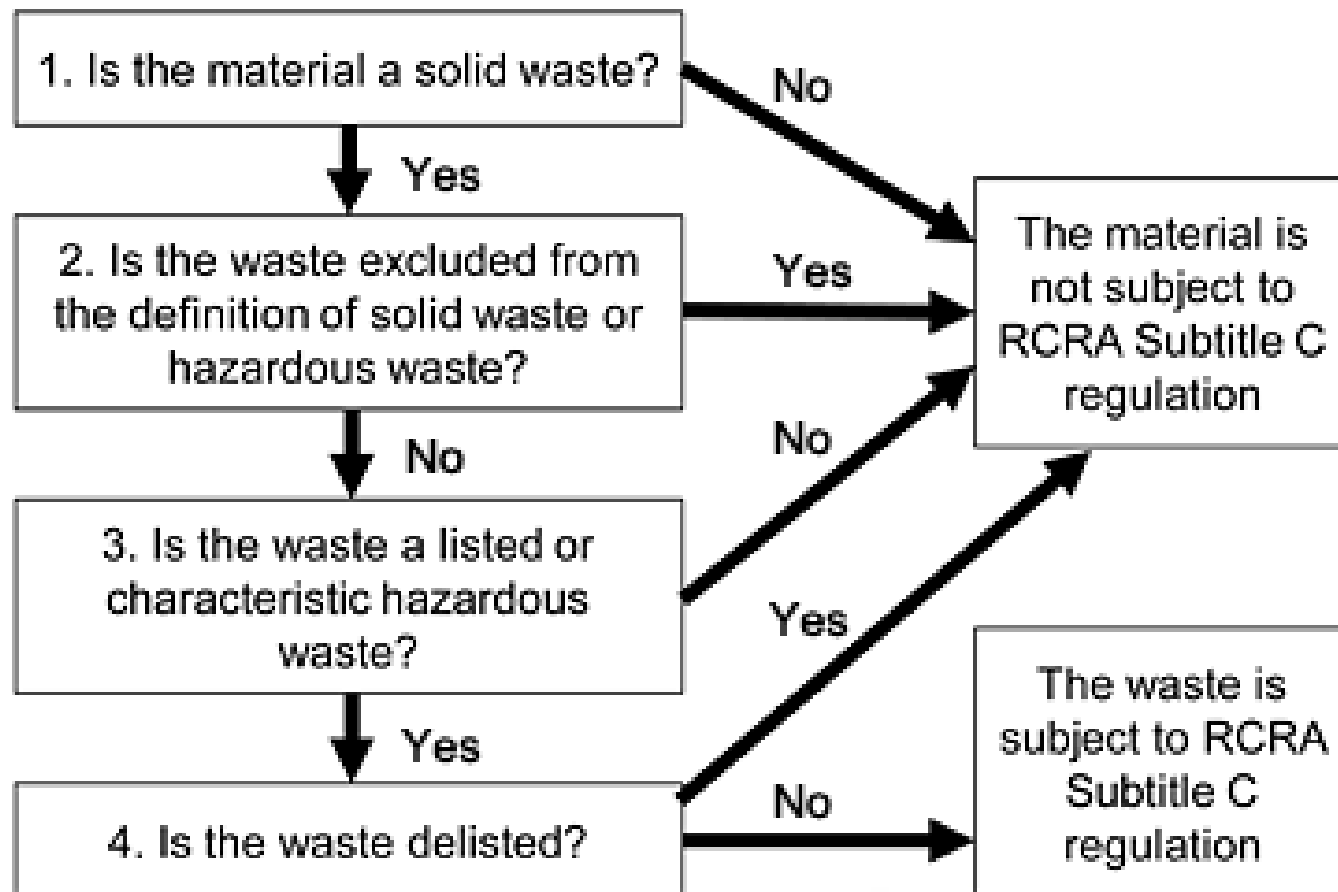


HAZARDOUS WASTE REQUIREMENTS

Who is subject to hazwaste requirements?
Are these different from hazmat requirements??

Hazardous Waste, HW

The Hazardous Waste Identification Process



HW by Definition (22 CCR 66261.3)

- California definition of HW includes:
 - If by characteristic (I, C, R, T)
 - If listed in 40 CFR Subpart D
 - If listed in 22 CCR Appendix X
 - If listed in 22 CCR 66261.50 (Mercury-containing products)
 - Mixture of a solid waste with a HW
 - Mixture of HW

IGNITABILITY

Flashpoint $<140^{\circ}\text{F}$



CORROSIVITY

$\text{pH} < 2$ or a $\text{pH} > 12.5$



Characteristic
(40 CFR 261.21 – 261.24)



REACTIVITY

Wastes that are unstable
under normal circumstances



TOXICITY

(California is more stringent)
Harmful or fatal when
absorbed, inhaled, or ingested

California HW Toxicity Characteristics (22 CCR 66261.24)

- Acute Toxicity
- Oral Toxicity
- Dermal Toxicity
- Inhalation Toxicity
- Acute Aquatic Toxicity



California's Persistent and Bioaccumulative Toxic Substances (22 CCR 66261.24)

- Inorganic constituents
 - Both Waste Extraction Test (WET) soluble and total concentrations (arsenic, asbestos, copper, lead, mercury, nickel, zinc, etc...)
- Organic constituents
 - Both WET soluble and total concentrations (certain pesticides, wood preservatives, DDTs, PCBs, etc.)

- F-listed (non-specific source wastes):
 - solvents that have been used for cleaning or degreasing
- K-listed (source-specific wastes):
 - certain wastes from specific industries, such as petroleum refining or pesticide manufacturing
- U-listed (discarded commercial chemical products):
 - Pure, unused or off-specifications
 - specific commercial chemical products that have not been used
- P-listed (discarded commercial chemical products):
 - Acutely hazardous, pure, unused or off-specification
 - Epinephrine base

HW by Listing (22 CCR Appendix X)

- If a waste consists of or contains a chemical listed in 22 CCR Appendix X, the waste is presumed to be a hazardous waste.

Examples:

- | | |
|----------------|---|
| - Acetic acid | - Printing ink |
| - Acetone | - Weed killer |
| - Battery acid | - Cathode ray tube (CRT) devices |
| - Ashes | - Liquid crystal display (LCD) monitors |
| - Insecticides | - Plasma televisions |
| - Lab waste | - Oil |
| - Pigments | - Etc. |

HW by Listing (22 CCR 66261.50)

- Mercury-containing motor vehicle switches
- Non-automotive mercury switches
- Lamps
- Mercury-added novelties
 - Novelties as defined in 22 CCR 66273.9 (UW)
 - Toys, ornament, candles, jewelry, holiday decoration, apparel
 - Novelties painted with mercury-containing paints

HW Generator Categories

In California...

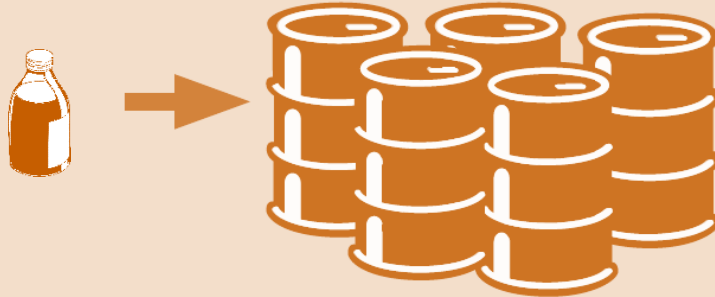
***Large Quantity Generator
(LQG)***

***Small Quantity Generators
(SQG)***



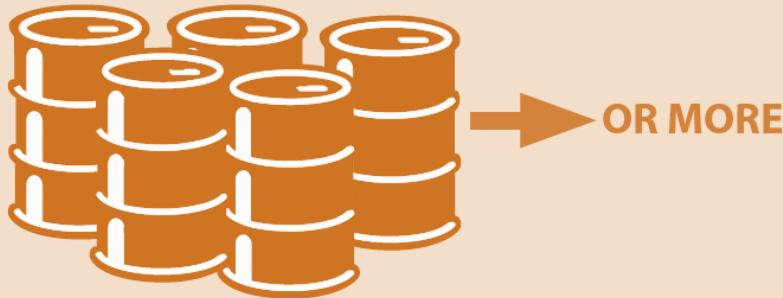
SQG vs LQG

SMALL QUANTITY GENERATOR (SQG)



Any amount and up to
< 5 drums or
< 275 gal or
< 2,200 lbs or
< 1,000 Kg
Per calendar month

LARGE QUANTITY GENERATOR (LQG)



≥ 5 drums or
≥ 275 gallons or
≥ 2,200 pounds or
≥ 1,000 kilograms
Per calendar month

**This is for guidance purposes only. Not all chemicals have the same density.*

Large Quantity Generators (LQGs)

LQG:

- ≥ 1,000 Kg of HW/month, or
- ≥ 1 Kg of Acute HW/month, or
- ≥ 1 Kg of EHS HW during any month

Accumulation Time:

90 days

Requirements:

- Contingency Plan
- Employee Training
- Records for 3 years
 - Disposal Records
 - Employee Training records ARE required

Some district yards are LQG

Contingency Plan for LQG (22 CCR 66265.51-54)

- Actions to be taken in response to fires, explosions, or any release of HW
 - to air, soil, or surface water
- Description of arrangements made with ER personnel
 - local police, fire department, hospitals, contractors, and State & local emergency response teams
- Emergency equipment available
 - fire extinguishing systems, spill control equipment, communication, alarms, decontamination
- Evacuation plan
 - routes, alternate routes

Contingency Plan for LQG (22 CCR 66265.51-54)

- Emergency Coordinators
 - Names, addresses, and phone numbers (office and home)
- Maintain at facility and submit a copy to ER personnel
- Keep contingency plan current!
- In the events of spills, **immediately notify**;
 - State Office of Emergency Services (**OES**) at (800) 852-7550
 - **HMD** at (858) 505-6657
 - If threat to human health outside the facility, or if a spill has reached surface water, immediately, notify the National Response Center (NRC) at (800) 424-8802

Employee Training for LQG (22 CCR 66265.16)

- Employees have to trained so they respond effectively to emergencies
 - Contingency Plan
- Employees have to be trained within six months
 - From hiring
 - From assignment
- Annual refresher training is required
- Document training and keep records
 - For current employees, keep until closure of facility
 - For former employees, at least three years

Small Quantity Generators (SQGs)

Who?

< 1,000 Kg of HW/month, and
< 1 Kg of Acute HW/month,
and
< 6,000 Kg of HW on site at
any time

Accumulation Time:

180 days, or
270 days if the destination
facility is > 200 mi away

Requirements:

- Contingency Plan
- Employee Training
- Records for 3 years
 - Disposal Records
 - No Employee Training records required

Most individual schools are SQG

Contingency Plan for SQG

- Equipment required to be available, tested, and maintained:
 - Internal communication system (voice, signal)
 - Telephone or radio to contact responders
 - Fire control, spill control, and decontamination
 - Water at adequate volume and pressure
- All employees must be familiar with the proper waste handling and emergency procedures

Contingency Plan for SQG

- Must post info near phone:
 - Name and emergency phone number of emergency coordinator
 - Location of fire extinguishers and spill control material
 - Telephone number of police department, fire department, State or local emergency response team
- Keep contingency plan current!
- In the events of spills, **immediately notify**;
 - State Office of Emergency Services (**OES**) at (800) 852-7550
 - **HMD** at (858) 505-6657
 - If threat to human health outside the facility, or if a spill has reached surface water, immediately, notify the National Response Center (NRC) at (800) 424-8802

Employee Training for SQG

- SQG must ensure that all employees are thoroughly familiar with:
 - proper waste handling, and
 - emergency procedures
 - relevant to their responsibilities
 - during normal facility operations, and
 - during emergencies
- Employee training records are NOT required for SQGs
 - Records are still strongly recommended (for example, CalOSHA, Risk Managers, etc.)
 - NOTE: not to be confused with employee training records as required for facilities subject to hazardous materials business plan (HMBP)

HW, Identification Number

State ID Number

< 100 Kg of RCRA HW/month

≤ 1 Kg of Acutely RCRA HW/month

Non-RCRA HW

CAL | CAC

[Form DTSC 1358](#)

EPA ID Number

≥ 100 Kg of RCRA HW/month

> 1 Kg of RCRA Acutely HW/month

CAR | CAP | CAT | CAD

[Form EPA 8700-12](#)

Satellite Accumulation

- Containers of up to 55 gal per waste stream or up to 1 qt if Acutely or EHS HW
- Accumulation at or near the point of generation (satellite accumulation area)
- In control of the generator all the time (in line of sight or locked)
- Meet HW requirements (label, closed, good conditions, etc.)

HAZARDOUS WASTE SATELLITE ACCUMULATION	
Generator Information:	
NAME _____	
ADDRESS _____	
CITY _____	STATE _____ ZIP _____
EPA ID# _____	PHONE _____
COMPOSITION: (No abbreviations or chemical formulas)	
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
PHYSICAL FORM	
<input type="checkbox"/> Solid	
<input type="checkbox"/> Liquid	
HAZARD CLASS	
<input type="checkbox"/> Flammable	
<input type="checkbox"/> Corrosive	
<input type="checkbox"/> Toxic/Poison	
<input type="checkbox"/> Reactive	
SATELLITE ACCUMULATION START DATE: ____/____/____	
WASTE STORAGE ROOM START DATE: ____/____/____ Loc./Lab: _____	

Satellite Accumulation

- Once the container is full, within 3 days do the following:
 - Move container to HW storage area, and
 - Mark the date when the satellite accumulation limit was reached (2nd date), and
 - Attain to accumulation time per the generator status but never exceed 1 year total (from the initial accumulation start date)
- If the container does not get full within a year of satellite accumulation:
 - Dispose of the HW
 - Remember to never exceed 1 year



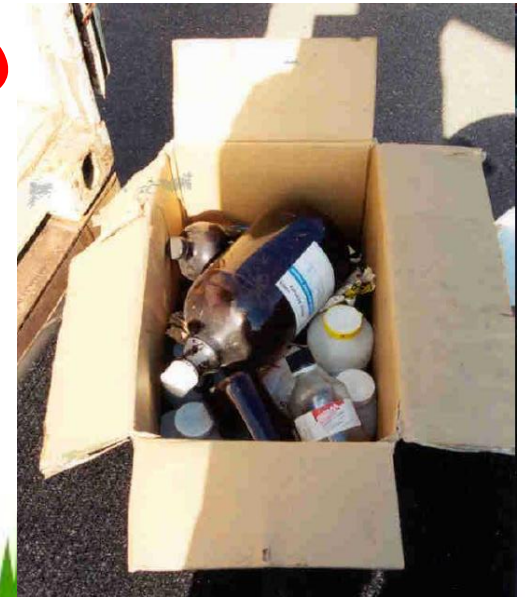
Labpacks



Yes



No



HW Label (22 CCR 66262.34(f))

Each HW label has to include:

HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL.

GENERATOR INFORMATION:

NAME _____

ADDRESS _____ PHONE _____

CITY _____ STATE _____ ZIP _____

EPA ID NO. / MANIFEST DOCUMENT NO. _____ / _____

EPA WASTE NO. _____ CA WASTE NO. _____ ACCUMULATION START DATE _____

CONTENTS COMPOSITION: _____

PHYSICAL STATE: ☐ SOLID ☐ LIQUID

HAZARDOUS PROPERTIES: ☐ FLAMMABLE ☐ TOXIC
☐ CORROSIVE ☐ REACTIVITY ☐ OTHER _____

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

- “Hazardous Waste”
- Physical State of the waste
- Composition of the waste
- Hazard characteristics of the waste
- Generator’s Name
- Generator’s Address
- Initial Accumulation Start Date

Universal Waste (22 CCR 66273)

- Not fully regulated as HW
- Not to be put in trash
- Not to be treated
- Stored for no longer than a year
- Employee Training + records
- Labeling (22 CCR 66273.34)

UNIVERSAL WASTE	
SHIPPER	_____
ADDRESS	_____
CITY, STATE, ZIP	_____
CONTENTS	_____

ACCUMULATION START DATE	_____

Universal Waste –

- Batteries
- Mercury-containing equipment
- Lamp(s)
- Electronic Device(s)
- CRT(s)
- CRT glass

Universal Waste (22 CCR 66261.9)

- Batteries
- Electronic devices
- Mercury containing equipment
- Cathode ray tubes
- CRT glass
- Aerosol cans
- Lamps



Electronic Devices (ED)

Electronic Devices include:

- Computers
- Telephones
- Answering machines
- Radios, Stereo equipment
- Tape players/recorders
- Video cassette players/recorders
- Compact disc players/recorders
- Calculators
- Some appliances

NOTE:

Electronic devices become a waste on the date they are discarded (e.g., when stored prior to being sent for reclamation)

(22 CCR 66273.3)

Universal Waste

 **No**



Universal Waste



Hazardous Waste Records

- Keep HW disposal records for three years
 - Waste manifests, Bills of lading, Land disposal restriction letters, etc.
- Keep employee training records
 - For current employees, keep until closure of facility
 - For former employees, at least three years
 - Remember that SQG are not required to keep employee training records; however, other CUPA programs and/or agencies might do so (i.e. HMBP requirements)
- Keep contingency plan
- Retain also waste analysis lab results, waste determinations made, etc.



MERCURY SPILLS

A little goes a long way

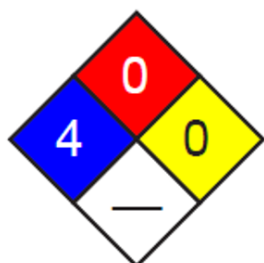
Mercury, Hg –training topics

- Mercury Basics
- Health and Cleanup Standards
- Detection Capability
- Spill Response Considerations/Initial Actions
- Spill Cleanup
- Case Studies

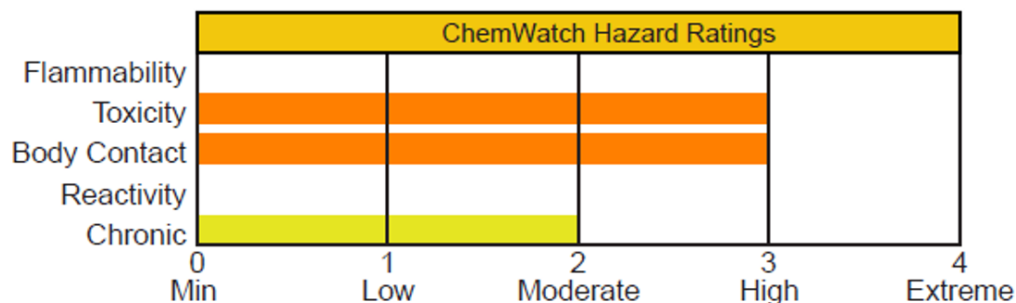


Mercury, Hg

- Elemental mercury evaporates readily at room temperature to form a colorless, odorless gas
 - The main concern is exposure for inhalation of vapors
 - Specially when indoors, where even a relatively small amount of mercury can result in the accumulation of very high levels of mercury vapors in the indoor



Fire Diamond



HMIS	
4	Health
0	Flammability
0	Reactivity

Table 2-1: Physical and Chemical Properties of Selected Mercury Species¹

Mercury Species	Elemental Mercury	Mercuric Chloride	Methylmercury* ²
Formula	Hg	HgCl ₂	CH ₃ HgCl
Atomic/Molecular Weight	200.59	271.52	251.10
Density	13.53 @ 25° C	5.4 @ 25° C	3.18 @ 20° C
Vapor Pressure	0.002 mm Hg @ 25° C ³		0.0085 mm Hg @ 25° C ⁴
Melting Point (°C) ⁵	-38.87°	276° ⁶	170°
Boiling Point (°C) ⁷	356.9°	302° ⁸	No data
Solubility (grams per liter) ⁹	5.6 x 10 ⁻⁵ @ 25°C	69 @ 20°C	0.100 @ 21° C

ANSI Signal Word

Danger!



Poison



Corrosive

Health Effects

Acute Effects: The onset of signs and symptoms usually is prompt, but may be delayed up to 12 hr

Systemic Effects by all routes: Nausea, vomiting, abdominal pain, diarrhea, excessive salivation, sweating, headache, giddiness, vertigo (dizziness), weakness, blurring or dimness of vision, miosis or mydriasis, loss of muscle coordination, slurred speech, muscle twitching (particularly tongue and eyelids), profound weakness, confusion, disorientation

Inhalation: Exposure to high vapor concentrations can cause severe respiratory damage. Other symptoms include wakefulness, muscle weakness, anorexia, headache, ringing in the ear, headache, diarrhea, cough

Eye: Irritation and corrosion | **Skin:** Severe irritation if allowed to remain in contact with mercury

Ingestion: Mercury generally passes through the digestive tract uneventfully. However, large amounts may get caught up in the intestine and require surgical removal

Medical Conditions Aggravated by Long-Term Exposure: Central nervous system disorders. Chronic exposure appears more common than acute and is primarily associated with central nervous system damage which can be permanent. Early signs of toxicity include weakness, fatigue, anorexia, weight loss, and gastrointestinal



ASTDR Health Guidance Levels

CRITERIA	MERCURY CONCENTRATION ($\mu\text{g}/\text{m}^3$ = micrograms per cubic meter)
ATSDR indoor action level to isolate/evacuate residents	$10 \mu\text{g}/\text{m}^3$
Personal belongings and vehicles	$6.0 \mu\text{g}/\text{m}^3$ $>10 \mu\text{g}/\text{m}^3$ (Consider disposal of belongings)
ATSDR residential occupancy level	$1.0 \mu\text{g}/\text{m}^3$
Schools and occupational settings	$3.0 \mu\text{g}/\text{m}^3$
Recommended level for SCBA (or approved APR)	$25 \mu\text{g}/\text{m}^3$
IDLH	$10 \text{ mg}/\text{m}^3$ ($10,000 \mu\text{g}/\text{m}^3$)

Field Air Monitoring/Detection

Lumex RA-915+ Mercury Vapor Analyzer

- The range of detection is 2 ng/m³ to 200,000 ng/m³ (0.000002 mg/m³ to 0.02 mg/m³)
- The accuracy is +/- 20%
- The sample volume is set at 20 liters per minute (l/min)
- Cost –starting ~\$13,000.00

RA-915+ with optional attachments:



RA-915 Light



RA-915+ with RP-91C Attachment
for solid samples analysis



RA-915+ with RP-91 Attachment
for water solutions analysis

Field Air Monitoring/Detection, *Mercury Vapor Analyzer*

- Jerome® J405
 - Detection limit 999 $\mu\text{g}/\text{m}^3$ down to 0.5 $\mu\text{g}/\text{m}^3$
 - Meets EPA & ATSDR cleanup levels
 - Gold film sensor technology



SPILLS

Small Spill (<10 small beads): If the mercury spill is very small, (e.g., a broken thermometer), follow the directions on the next slide to consolidate and contain the spill.

Intermediate-Size Spill (Few ml): Intermediate-sized spills in the workplace may be cleaned up by workers themselves if they have been trained to use spill kits and protective clothing. Gloves, eye protection, shoe covers and laboratory coats are sufficient when cleaning up a spill of a few milliliters of mercury.

Large Spill (>Than a few ml): For larger spills, especially those with exposed victims, professional help is essential. Federal EPA has specific tools to help local jurisdictions and can be contacted if needed.



Initial Protective Actions/Recommendations

- Isolate the room from the building if possible
 - Close the door or other common access
- Check ventilation ASAP
 - Shut it down as it will contaminate the entire building
- If the room can be isolated with independent ventilation (Fans, windows) keep it going to reduce the mercury vapor
- Contaminated clothing and shoes must not be worn off-site
- Remove suspect items place into plastic bags for monitoring



Do Not,

- **Never** use a vacuum cleaner to clean up mercury.
 - The vacuum will put mercury into the air and increase exposure.
- **Never** use a broom to clean up mercury.
 - It will break the mercury into smaller droplets and spread them.
- **Never** pour mercury down a drain.
 - It may lodge in the plumbing requiring removal. If discharged, it can cause pollution of the septic tank or sewage treatment plant.
- **Never** wash clothing or other items that have come in direct contact with mercury in a washing machine.
 - Mercury may contaminate the machine and/or pollute sewage.



Simple Clean-up Technologies

Lab Safety Supply[®] **Hg Absorb[™] Powder**

- **Hg Absorb[®] Powders** convert elemental mercury on work surfaces, in cracks and hard-to-reach areas into a metal/mercury amalgam



Mercury Indicator Powder

- Identifies the Presence of Mercury in Suspected Contaminated Areas,
- Results in 24 Hours



MERCURY RECOVERY VACUUMS

- Mercury Vacuums are for collecting both liquid mercury and mercury contaminated particulate matter.
- Vacuum system features a liquid mercury separator (that allows the operator to collect and separate the mercury in a removable, sealable collection jar), a disposable collection filter bag, a 99.97% @ 0.3 micron HEPA (High Efficiency Particulate Air) Filter and a high capacity activated carbon filter.



Cost \$5,000.00 to \$10,000.00



Remediation/ Cleanup, More than a thermometer

- Will require PPE
 - Booties, Gloves, Respirator...
- May require specialized Cleanup Equipment
 - Mercury Vacuum, Mercury Vapor Monitor with adequate detection capability
- Should be done by an experienced contractor with staff that have required training
- May take several days/weeks to cleanup
- May generate multiple drums/roll-offs of waste
- All visible mercury, grossly contaminated items must be removed as hazardous waste
- Remove Porous items
 - carpet, furniture, beds, clothing these items are difficult to decontaminate
- Less than $\sim 50 \mu\text{g}/\text{m}^3$ can be “Baked Out”
 - Reducing concentrations below $10 \mu\text{g}/\text{m}^3$
- Greater than $10 \mu\text{g}/\text{m}^3$ generally deemed hazardous waste

Remediation, Post-Cleanup Procedures

At the conclusion of the decontamination procedures the following steps should be taken: **“Bake Out”**

- Facility should be warmed up to 80° F to 85° F for a minimum of eight hours.
- Vent the facility for a minimum of two hours with open door and windows and circulate air with fans.
- Thermostat should then be set for normal living conditions and doors and windows closed for four hours.



Mercury Cleanup

Remediation Goals:

Soil

- **Region 9 USEPA Preliminary Remediation Goals:**
 - Residential Soil - 23 mg/kg
 - Industrial Soil - 310 mg/kg
 - Greater than 260 ppm

Mercury Hazardous Waste Limits:

Federal RCRA Hazardous Waste Determining Level:

- Toxicity Characteristic Leaching Procedure: TCLP: 0.2 mg/L

California Hazardous Waste Determining Levels:

- STLC: 0.2 mg/l
- TTLC: 20 mg/Kg

Universal Waste. Households are not exempt from the UW Rule. Households must recycle their UW.

- Mercury thermostats, thermometer, switches, CFL) are prohibited from disposing them in the trash

Mercury Responses in San Diego County

YEAR	# of Responses
2011	5
2012	2
2013	8
2014	7
2015	9
2016	6
2017	8

Mercury Responses in San Diego County

Case Study, *Mission Bay High School*



Mission Bay High School Response

- 10-8-10 SDUSD Health and Safety reported a mercury spill at Mission Bay High School in classroom 243, with one student exposed.
- The school was in session at the time of the incident, with students in attendance.
- Information regarding the exact cause, and amount was not available.



Mission Bay High School Response

- DEH advised the affected room be evacuated, the HVAC be shut down, any adjacent rooms with shared HVAC also be vacated.
- Any exposed students be identified, isolated and held for screening.
- SDFD was notified and dispatched to the school.



Mission Bay High School Response

- Upon arrival on seen school staff reported they identified rooms 243, 193, & 194, and a Custodial Supply room as being potentially contaminated.
- Also 8 students were identified as having possible contact/contamination.
- An initial survey of rooms 243 and 194 found contamination, room 193 was clean.
- Unified Command was established; SDFD, DEH HIRT, SDUSD-PD, SDPD, HHSA

Mission Bay High School Response

- Mission Bay High School Placed on Lock Down.
- A student screening area was set up in the courtyard near the Main Office.
- The 8 students with suspected contamination were screened.
- Personal belongings (book bags, backpack, purses, clothing, and jewelry) with contamination greater than $1 \mu\text{g}/\text{m}^3$ were bagged, labeled and placed in a secure area to bake out.



Mission Bay High School Response

- Two students were found to have skin contamination and were directed to shower and put on clean cloths. Clothing was bagged, labeled, and placed in the designated area for bake out.
- School Staff provided an additional list of rooms (252, 154, 351, 215, 254, 341, 223, 312, and 331) that students went after possible exposure in rooms 243 and 194 .
- Large media contingent present.



Mission Bay High School Response

- All students that had attended a class in one of 10 rooms suspected to have contamination were directed to the screening area, for screening.
- Approximately 120 additional students were screened. One student was found to have a backpack with contamination which was taken to the bake out area.
- Additional rooms identified for possible contamination: 162, Nurse's Office, Restrooms where students changed or decontaminated, were monitored. No contamination was found in any of these rooms.



Mission Bay High School Response

- Information provided by the students indicated that mercury spilled on the school bus they rode to school that day. District staff reported the bus transported 48 students from Bay Park Elementary, and 23 students from Tolar Elementary after the alleged spill.
- Both Bay Park and Tolar placed on Lock Down.
- HIRT staff was sent to the district yard where the bus was currently located. Observations inside the bus did not find and visible indication of a spill, concentrations were $<7 \mu\text{g}/\text{m}^3$. The bus was directed to be isolated and baked out.



Mission Bay High School Response

- The shoes of the bus driver showed contamination of $\sim 10 \mu\text{g}/\text{m}^3$; they were bagged and the driver was directed for bake out. He reported going home at lunch, his house would be monitored later.
- HIRT staff was then sent to the both Bay Park Elementary, a Toler Elementary to monitor the students that rode the bus after the reported spill on the bus. No contamination on any student at these two schools was found.

Mission Bay High School Response

- Offsite Residences
- HIRT staff went to the home of the bus driver to conduct monitoring. The driver reported his shoes were baking out since advised to do so. Monitoring of his shoes, and house did not find any contamination.
- The student that brought the Mercury to school reported he originally got the container of mercury from his uncle's apartment. He took the container to his house where he and his family members played with it in the backyard between the front and back house.

Mission Bay High School Response



COUNTY OF SAN DIEGO Department of Environmental Health Hazardous Materials Division



Clean up Guidance for Personal Belongings Screened by the Hazardous Materials Response Team (HIRT)

Parents:

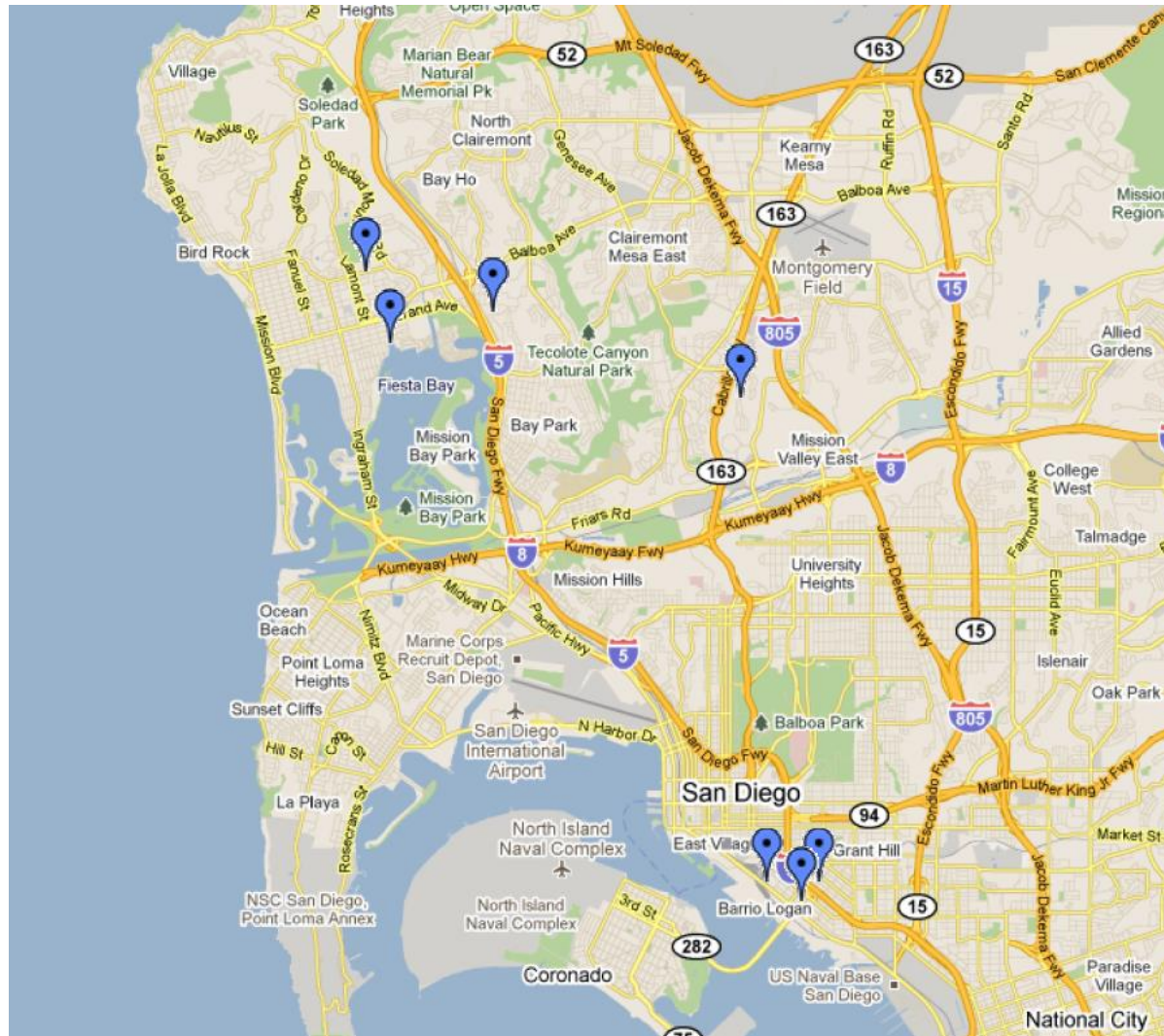
Your student may have been exposed to mercury while at school today. A student brought some mercury to school and there was an accidental release in a class room. Our Hazardous Materials Response Team (HIRT) screened your child for mercury while at school but if you have any concerns you can take the following steps to clean their clothing.

HOW TO CLEAN YOUR CLOTHES:

The Hazmat team would have taken away items that were too contaminated to use the following process:



Mission Bay High School Response



Lessons Learned

- Timely discovery and reporting can reduce the spread of contamination and limit exposures.
- Initial Protective Actions: Evacuate & Isolate Area, Turn off HVAC, Identify potentially contaminate persons, can reduce spread of contamination.
- Schools may experience Mercury Spills even if they have gone Mercury Free.
- Responses to Schools require coordinated response, multiple agencies, Unified Command.
- Response could involve large numbers of students, and rooms response may need to be e “timely”
- Call for Mutual Aid early.

Mercury Exposure Assessment

Environmental Metallic Mercury Exposure Assessment

Epidemiology Program 8.2010 Phone: 619-515-6620 www.sdepi.org

Date of Interview:

Investigator:

Reference #:

Case Information

<u>Case name-Last</u>	<u>First</u>	<u>M.I.</u>	<u>Date of Birth</u>	<u>Age</u>	<u>Gender</u>
					<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other
<u>Case Address</u>	<u>City</u>	<u>Zip</u>	<u>County</u>	<u>Home Phone</u>	<u>Work Phone</u>
					<u>Email</u>
Race: <input type="checkbox"/> African-American <input type="checkbox"/> White <input type="checkbox"/> Native American <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Other:					Ethnicity <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Non-Latino

Exposure Information

Place of Exposure: (Site address and contact phone number, location of mercury at site. Be specific)

<u>Exposure Address</u>	<u>City</u>	<u>Zip</u>	<u>Site Phone</u>	<u>On-site Location of Mercury</u>	<u>Measured Mercury Level</u>

Were you exposed to mercury? (Briefly describe circumstances, or describe case association with site)

<input type="checkbox"/> As a resident	
<input type="checkbox"/> As a visitor	
<input type="checkbox"/> As an employee	
<input type="checkbox"/> As a site worker	
<input type="checkbox"/> Other	

What kind of contact did you have with mercury? (Check all that apply – briefly describe contact)

<input type="checkbox"/> Bare hands/feet <input type="checkbox"/> Other bare skin <input type="checkbox"/> Shoes <input type="checkbox"/> Clothing <input type="checkbox"/> Ingestion <input type="checkbox"/> Inhalation <input type="checkbox"/> Other		<u>Measured Mercury Level</u>

How long do you think you were exposed to the mercury at your (home, school, workplace, etc.)?

<input type="checkbox"/> Less than 24 hours	
<input type="checkbox"/> 1-3 days	
<input type="checkbox"/> 3-7 days	
<input type="checkbox"/> One week or more	



MEDICAL WASTE

Medical Waste (MW)

- Regulated under HSC Section 117600 – 118360 known as the Medical Waste Management Act (MWMA) and the San Diego County Code Chapter 12
- County of San Diego HMD is the local enforcement agency for the MWMA
- Medical waste in schools is typically found in the health or nurses office



Medical Waste

LQG of MW:

≥ 200 lbs per month

SQG of MW:

< 200 lbs per month

Medical waste at schools:

- Sharps
 - Used needles
- Pharmaceutical
 - Medications left by students

Medical Waste Management Plan (MWMP)

- Required only for LQG of MW
- However, a document stating how the school contains, stores, treats, and disposes of any medical waste generated is needed (HSC 117945)
- Maintain records of any medical waste shipped offsite for treatment and disposal
 - Three years for SQG
 - Two years for LQG



Medical Waste, Sharps

- Place all sharps waste into a sharps container that is closed tightly when ready for disposal
- Label sharps containers with the words “sharps waste” or with the international biohazard symbol and the word “BIOHAZARD”
- Labeled with the generator information including the name, address, and phone number of the school when first put in use
- Store sharps containers ready for disposal not more than thirty days



Medical Waste, Sharps

- Sharps can also be managed with a CDPH approved alternative technology...such as an *Isolyzer*
- The same labeling requirements apply to an approved technology
 - Look in the California Department of Public Health (CDPH) [website](#) for the most current list of “Alternative Medical Waste Treatment Technologies”



MW, Pharmaceutical

- Clean, leak resistant, rigid container in good repair with tight fitting cover
- Generator's label and the words "HIGH HEAT" or "INCINERATION ONLY" on lid and sides of container
- Store not longer than 90 days when ready for disposal, or at least once per year





INSPECTION PROCESS

What to expect...

Inspections are...

- Unannounced
- Comprehensive
- Types
 - Routine
 - Typically, every 24 months
 - Follow-up
 - If needed to determine return to compliance
 - Investigations
 - Complaints, incidents, etc.
- Include: walk through and record review

Areas to Inspect:

- Grounds & Maintenance
- Fleet maintenance
- Custodial Services
- Swimming Pool
- Cooling/Boiler Room
- Nurse's Office
- Emergency Generator
- Dumpster
- UW management area
- HW storage area
- District or Contractor's Trailers
- Biology Lab
- Chemistry Lab
- Physical Sciences
- Auto Body & Repair Shop
- Wood Shop
- Welding Class
- Drama/Set Design
- Art/Photography Class
- Gardening
- ASB Center
- ROP Classes

During the Inspection,

- Bring keys, map, pen/sharpie, labels
- Correct violations as you come upon them
- Ask questions
- Inspectors will ask questions
- The inspector may take photographs and/or samples

After Inspection,

- Inspector will write a report
 - If evidence of a violation is observed the report contains a **Notice to Comply**, an **Official Notice**, or a **Notice of Violation**
- Debrief with the school representative
- Copy of report and photographs will be sent via email
- If violations were noted:
 - Correct any remaining violations by the due date indicated
 - Submit corrective action documentation within 30 days



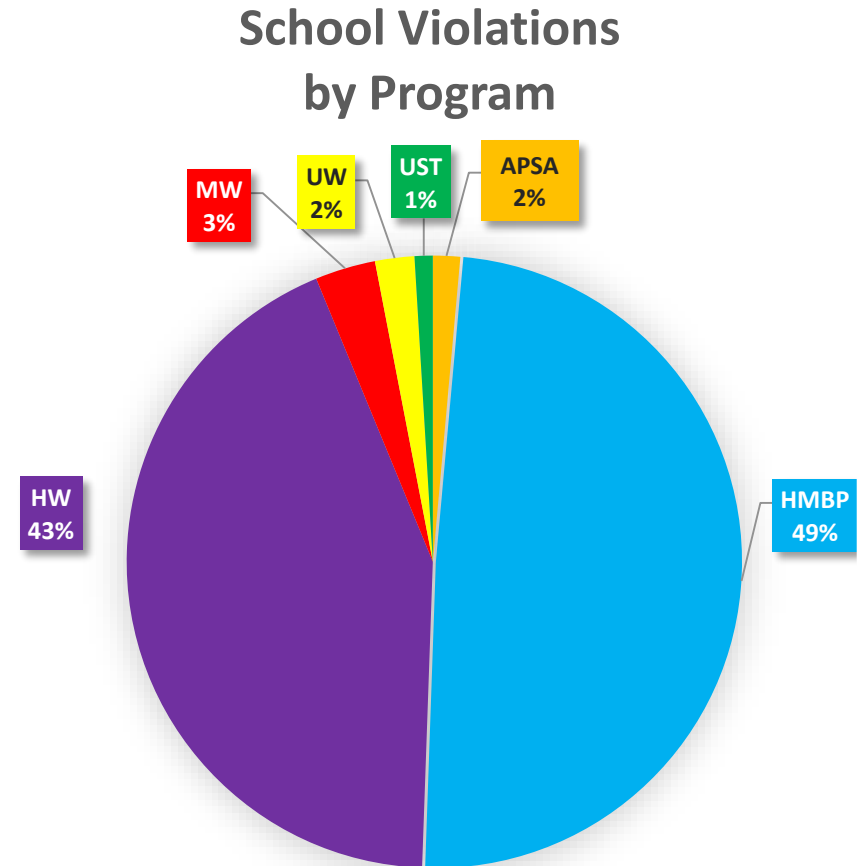
COMMON VIOLATIONS CITED AT SCHOOLS

We reviewed compliance data going back six years...

Let's review the top 10 violations cited.

Top 10 Violations Cited at Schools... the big picture

- 144 permitted schools
- 337 inspections over the past 6 years
- 627 violations cited
- Top 10 violations account for almost 60% of all violations cited



#1 Annual HMBP Certification

Does this requirement apply to your school?

👍 **Yes:** if your facility stores or handles hazardous materials or wastes at or above 55gal / 500lbs / 200 ft³

1010008 HMBP not certified annually as complete and accurate in CERS.

HSC 25508(a)(1)(A), 25508.2, 19 CCR 2654(b)

Facility Information

- Business Activities
- Business Owner/Operator Identification

Hazardous Materials Inventory

- **Hazardous materials & mixtures (HMBP)**
- **Site Map (HMBP)**
- Hazardous wastes
- Medical & pharmaceutical wastes

Emergency Response & Training Plans

- Template in CERS is an all-in-one document
- Emergency response plan (HMBP)
- Training plan outlines your annual training (HMBP)
- Contingency plan (Hazardous Waste)

#1 Annual HMBP Certification Compliance Tips

Understanding when you need to submit in CERS

- Remember three sections must be submitted & accepted within the past 12 months
- CERS Submittal history shows submittal dates by element.
- Submitting all 3 elements each time is easier to track

Previous Submittals for this Facility				
Submitted	Facility	Inventory	Plans	UST
<u>3/10/17</u>	<u>Accepted</u> ⚠ 3/10/2017	<u>Accepted</u> 3/10/2017	<u>Accepted</u> 3/10/2017	
<u>2/28/17</u> <u>1:03PM</u>	<u>Not Accepted</u> 3/1/2017		<u>Accepted</u> 3/6/2017	
<u>2/28/17</u> <u>11:11AM</u>	<u>Not Accepted</u> 3/6/2017		<u>Not Accepted</u> 3/6/2017	
<u>2/7/17</u> <u>2:42PM</u>	<u>Accepted</u> ⚠ 2/10/2017	<u>Not Accepted</u> 2/13/2017	<u>Not Accepted</u> 2/13/2017	
<u>2/7/17</u> <u>2:34PM</u>	<u>Not Accepted</u> 2/10/2017	<u>Not Accepted</u> 2/10/2017		
<u>2/10/15</u>	<u>Accepted</u> 4/10/2015	<u>Not Accepted</u> 4/10/2015	<u>Accepted</u> 4/10/2015	

#2 Hazardous Waste Labeling

Does this requirement apply to your school?

👍 **Yes:** if your facility stores/handles/disposes of hazardous waste(s) in any amount at any time

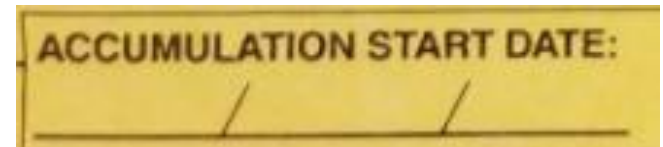
3030007 Failed to properly label/date hazardous waste container &/or tank.
22 CCR 66262.34(f)

HAZARDOUS WASTE		
STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY OR THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL.		
GENERATOR INFORMATION:		
NAME _____		
ADDRESS _____		PHONE _____
CITY _____		STATE _____ ZIP _____
EPA ID NO. /	MANIFEST DOCUMENT NO. _____ / _____	
EPA WASTE NO. _____	CA WASTE NO. _____	ACCUMULATION START DATE _____
CONTENTS COMPOSITION: _____		
PHYSICAL STATE: <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID		
HAZARDOUS PROPERTIES: <input type="checkbox"/> FLAMMABLE <input type="checkbox"/> TOXIC <input type="checkbox"/> CORROSIVE <input type="checkbox"/> REACTIVITY <input type="checkbox"/> OTHER _____		
[_____]		
[_____]		
[_____]		
D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX		
HANDLE WITH CARE!		

#2 Hazardous Waste Labeling Compliance Tips

- Train staff that may handle or generate hazardous waste on the labeling requirements –providing examples helps.
- Remember accumulation start dates.
- Make labels easily available.
- Check for labeling when you do your required weekly inspections of hazardous waste accumulation areas.

TRAINING



#3 HMBP Training Not Completed or No Records

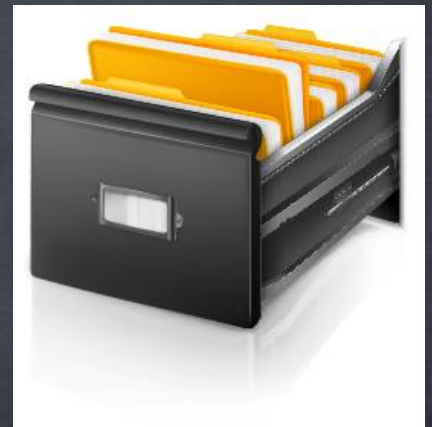
1020002 Initial &/or annual employee training not conducted in safety procedures for a hazardous material release or threatened release &/or employee training records not available or not maintained for 3 years.

HSC 25505(a)(4); 19 CCR 2659(b)

Does this requirement apply to your school?

👍 **Yes:** if your facility stores or handles hazardous materials or wastes at or above 55gal / 500lbs / 200 ft³

Note: Additional training requirements may apply for other CUPA programs



#3 HMBP Employee Training Compliance Tips

- Does your staff know what your emergency response plan procedures are?
- Does your staff know who your emergency coordinators are?
- Are emergency coordinators aware of notification requirements?
- Does your staff understand how to safely mitigate a release to minimize potential harm to persons, property, or the environment? If it's a small incident? What about a larger incident?
- Does your staff understand evacuation plans and procedures?
- Are you training new employees within 6 months?
- Are you keeping records for 3 years?
- Are the records readily available for inspectors?

#4 Hazardous Waste Manifest Recordkeeping

3010010 Failed to maintain copies of Uniform Hazardous Waste Manifest, consolidated manifest, or Bills of Lading for 3 years.

*HSC 25160.2(b)(3), 25185(a)(4);
22 CCR 66262.40(a), 66262.23(a)(3).*

Does this requirement apply to your school?

👍 **Yes:** if your facility has stored/handled/disposed of hazardous waste(s) in any amount in the past 3 years

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number			
					JJK			
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)						
Generator's Phone:								
6. Transporter 1 Company Name		U.S. EPA ID Number						
7. Transporter 2 Company Name		U.S. EPA ID Number						
8. Designated Facility Name and Site Address		U.S. EPA ID Number						
Facility's Phone:								
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	1.							
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name			Signature			Month	Day	Year

#4 Manifest Recordkeeping Tips

- Ensure manifest records for the past 3 years are readily available for inspections.
 - Ensure these include the Treatment, Storage, or Disposal Facility (TSDF) signature/date (cradle to grave!)
- Designate one spot for all your manifests to be kept for the whole school.
- Have you thought about scanning them? Electronic records are acceptable and may increase the chances that they are all kept in one place and available for inspection.

#5 HMBP Chemical Inventory Issues

Does this requirement apply to your school?

👍 **Yes:** if your facility stores or handles hazardous materials or wastes at or above 55gal / 500lbs / 200 ft³

1010004 Chemical inventory incomplete or not submitted in CERS.

*HSC 25505(a)(1); 25507(a); 25508.1(a-b);
19 CCR 2654 (a) or (d)*

Submittal was **Not Accepted** on 5/6/2017 by *Inspector Gadget* for [San Diego County Department of Environmental Health](#)

Comments by regulator:

Thank you for your submittal. I cannot accept the hazardous materials inventory or site map at this time. The Maximum Daily amount for Nitric Acid - Lead Iodide must be equal to or greater than the Largest Container. Additionally, the site map is missing the emergency response equipment symbol (+). Please update and submit a new site map in CERS. Please use the guidelines that were given during the time of inspection and the County of San Diego site map guidance found at:

[http://www.sandiegocounty.gov/content/dam/sdc/deh/hmd/pdf/hmbp/hm-952%20\(02-16\)%20HMBP.pdf](http://www.sandiegocounty.gov/content/dam/sdc/deh/hmd/pdf/hmbp/hm-952%20(02-16)%20HMBP.pdf) If you have any questions please contact your area inspector, John Smith at 619.555.4876 or john.smith@sdcounty.ca.gov

#5 HMBP Chemical Inventory Compliance Tips

- Update inventory in CERS within 30 days of :
 - A 100% or more increase of a previously disclosed material
 - Any handling of a previously undisclosed material subject to inventory requirements
- Review the inventory being submitted in CERS to ensure it is accurate against what is stored on site.
- Keep an overall inventory of hazardous materials and wastes at your school. Use the overall inventory determine if the *total* amounts for the permit to see if they are subject to HMBP reporting in CERS.
- Remember you have to resubmit with edits if it's not accepted.
- Always read the comments by regulator provided in CERS.

#6 HMBP Site Map Issues

1010005 Site map not submitted in CERS or not sufficient.

HSC 25505(a)(2); 25508.1(f); 19 CCR 2652(a)(3)

Does this requirement apply to your school?

👍 **Yes:** if your facility stores or handles hazardous materials or wastes at or above 55gal / 500lbs / 200 ft³

Submittal Element History

Submitted for CERS ID [REDACTED] on 3/2/2017 9:34AM by [REDACTED]
Submittal was **Not Accepted** on 5/6/2017 by [REDACTED] for [San Diego County Department of Environmental Health](#)
Comments by regulator: Thank you for your submittal. I cannot accept the hazardous materials inventory or site map at this time. The Maximum Daily amount for Nitric Acid - Lead Iodide must be equal to or greater than the Largest Container. Additionally, the site map is missing the emergency response equipment symbol (+). Please update and submit a new site map in CERS. Please use the guidelines that were given during the time of inspection and the County of San Diego site map guidance found at: [http://www.sandiegocounty.gov/content/dam/sdc/deh/hmd/pdf/hmbp/hm-952%20\(02-16\)%20HMBP.pdf](http://www.sandiegocounty.gov/content/dam/sdc/deh/hmd/pdf/hmbp/hm-952%20(02-16)%20HMBP.pdf). If you have any questions please contact your area inspector [REDACTED]

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Document Options
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Provided to Regulator
Stored at Facility
Exempt

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Document Title	Date Authored
Annotated Site Map (Official Use Only) (Adobe PDF, 37 KB)	5/3/2016

Created By: LeeAnn Howe on 3/2/2017 9:21 AM
Last Updated By: LeeAnn Howe on 3/2/2017 9:21 AM

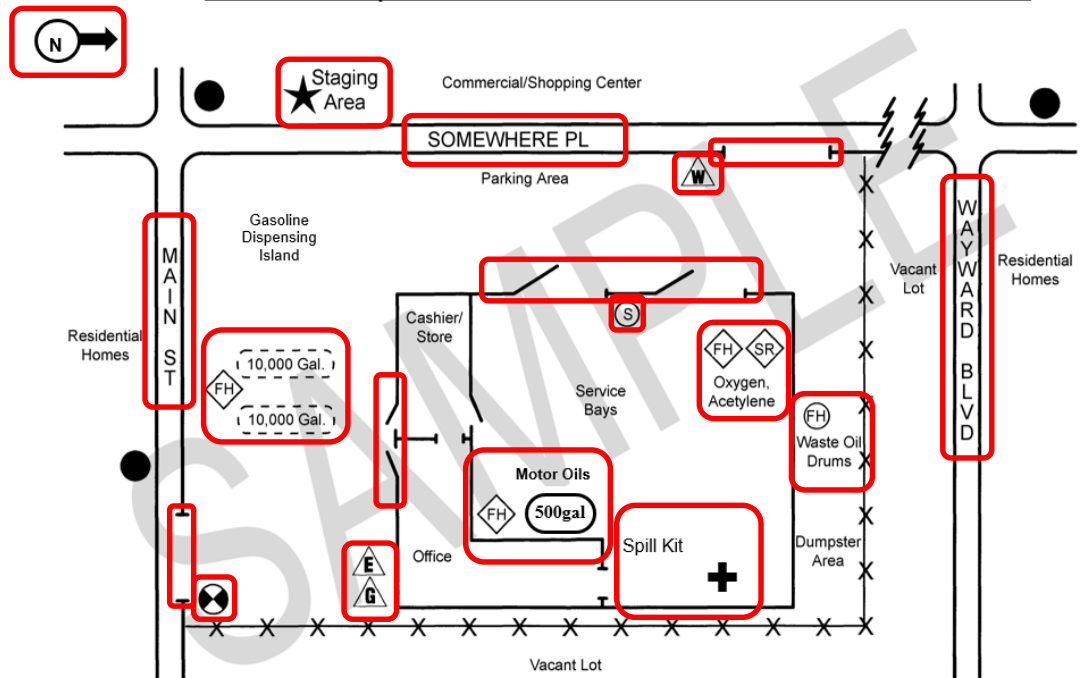
[Back](#)

#6 HMBP Site Map Compliance Tips

Make sure site maps have the following:

- ✓ North orientation
- ✓ Internal Roads/Adjacent streets
- ✓ Storm and sewer drains
- ✓ Entrance/Exits
- ✓ Emergency shutoffs
- ✓ Evacuation staging areas
- ✓ Hazardous materials handling and storage areas
- ✓ Emergency response equipment

BUSINESS ADDRESS 1234 Somewhere Pl., Anywhere, CA 92123



More Site Map Tips and Tricks

- Create an overview map of the school with the main symbols as they apply to the whole campus.
- Add additional pages for buildings/waste accumulation areas where more detail is needed.
- Maintaining maps in electronic format makes maps easier to edit and upload to CERS when changes are needed.
- Download San Diego CUPA's site map template and copy-paste the symbols to your map using your software of choice.

#7 HMBP not Submitted in CERS

*Does this requirement apply to
your school?*

👍 **Yes:** if your facility stores or
handles hazardous materials or
wastes at or above 55gal /
500lbs /200 ft³

**1010002 HMBP not submitted to the CUPA
in CERS.**

HSC 25508(a)(1)(A); 27 CCR 15188(a),(b),(d)

*This violation is cited when
there is no record of an accepted HMBP
submittal in CERS*

#8 HMBP not updated within 30 days of substantial change

*Does this requirement apply to
your school?*

👍 **Yes:** if your facility stores or
handles hazardous materials or
wastes at or above 55gal /
500lbs /200 ft³

**1010006 Failed to update HMBP in CERS
within 30 days of a substantial change to
any portion of the HMBP, including
inventory changes or facility
information.**

HSC 25508.1(a-f); 19 CCR 2654(d); SDCC 68.904(c)(6).

*“Substantial change” means any change in a
facility that would inhibit immediate response
during an emergency by either site personnel or
emergency response personnel, or that could
inhibit the handler’s ability to comply with HMBP
requirements , change the operational knowledge
of the facility, or impede implementation of the
business plan.*

#8 HMBP Updates Compliance Tips

Make sure to update and submit changes in CERS when any of the following occur:

- A 100 percent or more increase in the quantity of a previously disclosed material.
- Any handling of a previously undisclosed hazardous material subject to the inventory requirements of this article.
- A substantial change in the handler's operations occurs that requires modification to any portion of the business plan (including site map, and emergency response & training plans)
- Change of business, business name, facility address, or ownership.

#9 Accumulated Waste Too Long



Does this requirement apply to my school?

👍 **Yes:** If your school generates hazardous waste, the time limit will depend on your hazardous waste generator status

3030010 Accumulated waste too long (>180 or 270 days) or (>90 days).

*HSC 25201(a), 25123.3(h)(1); 22 CCR 66262.34(d);
40 CFR 262.34(e) and/or (f).*



#9 Waste Accumulation Time Limit Compliance Tips

- Understand your facility's generator status and the time limits associated with it.

	CESQG	SQG	LQG
Non-Acutely Hazardous Wastes	180 days After date 100 Kg of total HW is reached	180 days	90 days
If transported >200 mi	270 days After date 100 Kg of total HW is reached	270 days	90 days
Acutely/Extremely Hazardous Wastes		90 days From date 1 Kg acutely HW first accumulated	90 days From date 1 Kg acutely HW first accumulated
Accumulation Limit:		6000 Kg	No accumulation Limit

- Make sure all staff that may generate hazardous waste understand time limits.
- The accumulation start date should be the date the first drop of waste goes in.
- Manifest records and tank labels provide a clues-time frames between pick ups.

#10 Employee Familiarity with Waste Handling & Emergency Procedures

3020001 Failure to ensure employees are thoroughly familiar with proper waste handling and emergency procedures during normal facility operations and emergencies.

22 CCR 66262.34(d)(2); 40 CFR 262.34(d)(5)(iii)

Does this requirement apply to my school?

👍 **Yes:** if your facility stores/handles/disposes of hazardous waste(s) in any amount at any time



#10 Hazardous Waste Employee Training Compliance Tips

- Remember all hazardous waste generators are responsible to plan for emergencies at their business and must have a contingency plan.
- Ensure relevant personnel have basic training on proper waste handling and emergency procedures.
- Training documentation is not required for SQG (27 gal or 220 lbs or more per month).
- Training documentation is required for LQGs (generate 270 gal / 2200 lbs or more per month)

NOTE: do not confuse hazardous waste training requirements with hazardous materials training requirements.

Top 10 Violations in a Nutshell

1. HMBP not certified annually in CERS
2. Hazardous waste not properly labeled
3. HMBP training not done or missing records on site
4. HW shipping records (manifests) not available on site
5. HMBP Inventory incomplete or not submitted in CERS
6. Site map incomplete or not submitted in CERS
7. HMBP not submitted in electronically CERS
8. HMBP not updated after substantial change in CERS
9. Accumulated waste too long
10. HW training inadequate



RETURN TO COMPLIANCE

What to do if you're cited a violation...

Return to Compliance

- The violations are cited to the facility as a whole.
- All violations must be corrected within the timeframes specified in the inspection report.
- Corrective actions are outlined in the inspection report.
- Submit proof of correction; include photographs and supporting document as needed.

Return to Compliance

- The inspector may remind the business that the corrections are due or issue a Return to Compliance Letter.
- Failure to correct violations could mean a reinspection and fees, administrative, and civil or criminal enforcement.
- Remember that environmental penalties are high; HMBP violations \$2,000 and \$5000, HW \$25,000. These are per day per violation!

Return to Compliance



COUNTY OF SAN DIEGO

CORRECTIVE ACTION FORM TO DOCUMENT RETURN TO COMPLIANCE

FACILITY NAME: School Out of Compliance
 ADDRESS: Located somewhere within SD
 CITY/ZIP: San Diego / 00000

INSPECTION DATE: 03/28/2018
 RECORD ID #: _____
 SPECIALIST: _____
 INSPECTION CONTACT: _____
 TITLE: _____
 PHONE: _____
 E-MAIL: _____

VIOL#	DATE CORRECTED	INDICATE HOW VIOLATIONS WERE CORRECTED (Attach Any Supporting Documentation)	DUE DATE
#1 1010008			04/27/2018
#2 3030007	03/28/2018	Corrected during inspection	04/27/2018
#3 1020002			04/27/2018
#4 3010010			04/27/2018
#5 1010004			04/27/2018
#6 1010005			04/27/2018
#7 1010002			04/27/2018
#8 1010006			04/27/2018
#9 3030010			04/27/2018
#10 3020001			04/27/2018

I certify under penalty of law that this facility has corrected all violations marked on the Compliance Inspection Report/Notice of Violation. I have personally examined and am familiar with the information submitted and believe the information is true, accurate and complete. I am authorized to file this certification for the facility, and am aware that there are significant penalties for submitting false information.

PRINTED NAME OF FACILITY REPRESENTATIVE	SIGNATURE	DATE SIGNED
TITLE OF FACILITY REPRESENTATIVE		

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO THE ADDRESS LISTED BELOW

Questions? Thoughts? Later?

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